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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/601,652

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Masatoshi Yokota

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2292 7590 12/16/2008
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EXAMINER

HUNTER, ALVIN A

ART UNIT

PAPER NUMBER

3711

NOTIFICATION DATE

DELIVERY MODE

12/16/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/601,652	Applicant(s) YOKOTA, MASATOSHI	
	Examiner ALVIN A. HUNTER	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (USPN 5908358) in view of Iwami (JP 2002-078824).

Regarding claim 1, 2, 4, 6, 7, 9, and 11-13, Wu discloses a thermosetting urethane golf ball cover wherein the thermosetting urethane resin composition comprises an isocyanate group- terminated urethane prepolymer and a polyamine compound covering a core having a Young's modulus, also known as modulus of elasticity or stiffness modulus, from about 5000 to 100000 psi, or 34.5 to 689.5 MP, a (See claim 1 of Wu). In table 1, Wu shows examples of golf balls in which bear the cover of the present invention wherein it is shown that the covers have a hardness of 51 to 58 Shore D. Wu, through the examples, show the cover having a thickness of about 1.3mm (See Table 1) because the diameter of the golf ball is 1.68 inches and the center is 1.50 inches resulting in the cover thickness being $((1.68-1.58)/2)*25.4\text{mm}$. From the above, a modulus of at least 102 to 116 MPa would satisfy the applicant's criteria, and therefore, would anticipate the above claims. Wu discloses that the types of polyurethane that may be used are of thermoplastic and thermoset type in which

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examples of how those types are made. Wu does not limit the polyurethane to having the types of isocyanates disclosed. Wu also established that alicyclic isocyanates, which inherently has color stabilizing characteristics, can also be used to produce thermoset polyurethane (See Column 5, lines 39 through 50). Wu discloses the use of 4'-diaminodipheynlmethane but does not disclose the polyamine being 3, 3'-deithyl-5, 5'-dimethyl-4,4'-diaminodipheynlmethane. Iwami discloses a golf ball having a cover of a polyurethane composition made of a isocyanate group-terminated urethane prepolymer and a polyamine wherein the isocyanate are 4,4'-dicyclohexylmethane diisocyanate, isophorone diisocyanate, etc., and the polyamine desired is 4'-diaminodipheynlmethane and derivative thereof where 3, 3'-deithyl-5,5'-dimethyl-4,4'-diaminodipheynlmethane is noted as being a derivative thereof (See Paragraphs 0018 to 0026)). One having ordinary skill in the art would have found it obvious to use the above polyamine as taught by Iwami, within the composition of Wu in order to improve thermal resistance. Further, one having ordinary skill in the art would have found it obvious to use the above isocyanates, taught by Iwami, within the composition of Wu in order to improve weatherability, water resistance, and resilience.

Response to Arguments

Contrary to the finding of the Board of Appeals and Interferences (BPAI), the BPAI is in error on the finding of previously pending claims 14-16. Table I shows the golf ball having a diameter of 1.68 inches and the center having a diameter of 1.58 inches. Subtracting the two values would result in a value of 0.10 inch. The cover

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thickness is half the value obtained from subtracting the ball diameter and the center diameter which is 0.05 inches. In order to convert the values to mm, 0.5 inch must be multiplied by 25.4 which would result in 1.27mm or 1.3mm. In view of the above explanation, it is believed by the examiner that the rejection is proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN A. HUNTER whose telephone number is (571)272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alvin A Hunter/

Examiner, Art Unit 3711

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/Gene Kim/

Supervisory Patent Examiner, Art Unit 3711

/Robert P Olszewski/

Director, Technology Center 3700